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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/816,609

04/02/2004

David B. Finkenbinder

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02/02/2009

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EXAMINER

HAMO, PATRICK

ART UNIT

PAPER NUMBER

3746

MAIL DATE

DELIVERY MODE

02/02/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/816,609	Applicant(s) FINKENBINDER ET AL.	
	Examiner PATRICK HAMO	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-15 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-15 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to arguments filed on November 6, 2008.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-5, 7-15 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There was no positive identification or disclosure of lamination stacks as recited in claim 1 in the original disclosure. The examiner concedes that one skilled in the art would find it was probable at the time of filing that the unidentified portion of the motor assembly labeled 19 in the amended drawings filed April 2, 2008 were lamination stacks for the motor. However, lamination stacks are not an inherent part of motor structure and the unidentified portion could have been a casing or sleeve for the motor, ribs for connection to the casing 200, or a number of other possibilities. It would not have been obvious that it was clearly a lamination stack, and therefore to introduce the lamination stack into the claimed limitations would constitute an improper introduction of new matter into the application.

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For purposes of examination, the examiner will however interpret the limitation “wherein said sleeve is in touching contact with at least one of said lamination stack and windings” so that the sleeve is in touching contact with at least one of the windings or a portion of the motor that is radially adjacent to the windings, the portion of the motor radially adjacent to the windings being the unidentified portion of the motor assembly from the original disclosure.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7-9 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wentz, 5,567,127 in view of Soltani et al., 5,944,494 and further in view of Morimoto et al., 5,219,648.

Wentz discloses a motor and fan unit 14, wherein the motor includes a stator with windings 74, the fan coupled to the rotating shaft 82 of the motor and generating an airflow that passes over the motor (col. 1, ll. 20-34), the motor and fan encapsulated in a foam layer 16 or sleeve, a casing 12 or cover attached to the sleeve, the cover attached to the fan assembly at one end and an inwardly curved opening for the motor at the

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other end (fig. 1), the motor projecting out from this opening, interpreted as a cover hole, in a downward direction as seen in fig. 1.

However, Wentz does not disclose the following taught by Soltani: a motor 80 substantially in contact with a foam shell 72, 74 in order to isolate vibrations of the motor, in combination with the blower, to reduce the noise generated by operation of the combination (col. 1, ll. 17-22). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the apparatus of Wentz with the teaching of Soltani to further suppress vibration and noise.

Neither Wentz nor Soltani discloses the following taught by Morimoto: a melamine foam that absorbs sound and includes self-extinguishing flame properties for protection from heat and flame (col. 2, ll. 3-36).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the combination of Wentz and Soltani with Morimoto in order to absorb sound and protect from heat and flame (col. 2, ll. 3-36). Note that the combination would protect the motor from heat without the use of a temperature sensor, as none of the above references require a temperature sensor.

Claims 1 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finkenbinder et al., 6,703,754 in view Wentz, Soltani, and Morimoto..

Finkenbinder '754 discloses a motor and fan unit 10, the fan 26 coupled to the rotating shaft 20 of the motor 16 and generating an airflow that passes over the motor, a diffuser/bracket assembly also receiving the shaft, the diffuser/bracket assembly

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comprising a fan end bracket 35 and a diffuser 90 (see fig. 1) coupled to the fan end bracket, the fan end bracket comprising a planar plate 36 having bracket openings 75 adjacent to the motor bracket and the fan end bracket having at least one motor bracket 37 for carrying the motor assembly, the diffuser having peripheral openings (fig. 13) and a fan shroud 30 with an inlet port 31 and peripheral exhaust ports 34 enclosing the fan and secured to the fan end bracket.

However, Finkenbinder '754 does not disclose the following taught by Wentz: the motor and fan encapsulated in a foam layer 16 or sleeve, wherein the motor includes a stator with windings 74, a casing 12 or cover attached to the sleeve, the cover attached to the fan assembly at one end and including an inwardly curved opening for the motor at the other end (fig. 1), and a flange 94 that encourages a labyrinth air flow in order to absorb noise for quieter operation (Abstract, ll. 17-20). Nor does Finkenbinder '754 teach the following taught by Soltani: a motor 80 substantially in contact with a foam shell 72, 74 in order to isolate vibrations of the motor, in combination with the blower, to reduce the noise generated by operation of the combination (col. 1, ll. 17-22). It would have been obvious to one of ordinary skill in the art to have modified Finkenbinder '754 with the teachings of Wentz and Soltani to reduce vibration and noise.

Furthermore, neither Finkenbinder '754 nor Wentz teach the following taught by Morimoto: a melamine foam that absorbs sound and includes self-extinguishing flame properties for protection from heat and flame (col. 2, ll. 3-36).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified Finkenbinder '754 with Wentz and Morimoto in

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order to absorb noise for quieter operation (Wentz, Abstract, ll. 17-20) while also protecting the assembly from heat and fire damage (Morimoto, col. 2, ll. 3-36).

Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 10-12 above in view of Parker et al., Pat. Pub. No. 2004/0165986.

The references as applied to claims 10-12 above teach all the limitations substantially as claimed except for the following taught by Parker: foam 1235 being disposed on the surfaces of the blades 1200 in order to reduce the noise from the diffuser and increase air flow performance of the rotating blades (p. 4, paragraph 0049).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the references as applied to claims 10-12 above with Parker in order to further reduce the noise of the assembly by reducing the noise from the diffuser and increase air flow performance of the rotating blades (p. 4, paragraph 0049).

Response to Arguments

Applicant's arguments filed November 6, 2008 have been fully considered but they are not persuasive.

Applicants contend that the addition of the limitation drawn to a "lamination stack" is not new matter for a variety of reasons, namely that the lamination stack was clearly shown in the drawings as filed, it is an inherent component of an electric motor as

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described in the present application, and that it would have been recognized as such in the drawings by those skilled in the art. However, the examiner disagrees with the first two of these statements and, while conceding the possibility of the third, disagreeing as to whether that would establish the level of inherency or obviousness absent explicit disclosure that would overcome a new matter rejection. Firstly, the drawings show a rectangle at the outskirts of the motor. By no means is it clear that that is, without a doubt, a lamination stack. As the examiner conjectured in the prior action, one could reasonably surmise that the feature could be a number of other items, such as a rib or casing. Secondly, for the electric motor to have a lamination stack inherently depends on the type of motor. The motor may or may not include a magnetic core, it could be a coreless motor, it could be a winding on a core, but the core is made of sintered magnetic powder or a solid magnetic core. The specification does not explicitly clarify. As for reliance on past motors taught by Ametek, none of these issued patents were incorporated by reference to incorporate the type of motor taught. Thirdly, mere possibility that one skilled in the art would identify the drawing as a lamination stack does not make it an inherent feature. Therefore, the new matter rejection is maintained.

Arguments as to the applicability of the references in view of the deficiency of teaching the limitation drawn to the lamination stack are consequently moot. Applicant also argues that Wentz teaches away from the invention by teaching that the sleeve is placed in a spaced apart relation. However, as Wentz is being modified by the reference to Soltani, which teaches a modified shell that is capable of contact with the motor, this argument is moot.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PATRICK HAMO whose telephone number is (571)272-3492. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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